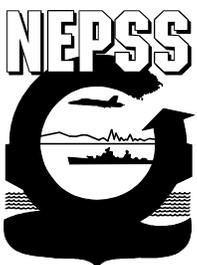




Marine Environmental Update



EPA to Delay Impaired Waters (TMDL) Rule

On July 16, 2001, Environmental Protection Agency Administrator Christie Whitman announced that the EPA would propose an eighteen-month delay to the July 2000 rule (see *Marine Environmental Update*, [Vol. FY00, No. 3](#)) concerning total maximum daily loads (TMDLs) for polluted waterbodies. During this period the EPA will undertake a broad public process to determine what substantive changes should be made to the July 2000 rule and to the TMDL program as a whole, to more effectively restore the Nation's waters. In the interim, the EPA and the states will continue to identify impaired waters and develop TMDLs under existing regulations. The EPA is taking this action because of ongoing controversy surrounding the July 2000 rule, including legal challenges brought by many organizations, and in light of a recent National Academy of Sciences study on the TMDL program (see articles below). The EPA will make a final decision on the proposal prior to September 30, 2001. The EPA intends to propose necessary changes by Spring 2002 and hopes to adopt such changes within the 18-month time frame.

More information may be found at www.epa.gov/owow/tmdl.

EPA Press Release, July 16, 2001.

Federal Register, Volume 66, Number 154, Thursday, August 9, 2001, pp. 41817- 41818.



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NAS Releases TMDL Program Assessment Report

A more science-based approach is needed to improve a federally mandated program that requires states to clean up the nation's lakes, rivers, and other bodies of water, says a new report from the National Academies' National Research Council. Despite three decades of progress in controlling discharges from wastewater treatment plants and industry, pollution from other sources is jeopardizing water quality and the ability of states to achieve further progress.

Under Section 303(d) of the Clean Water Act, each state must identify polluted waters, put them on its list of impaired waterbodies, and establish Total Maximum Daily Loads (TMDLs) which determine the amount by which sources of pollution would need to be reduced to meet the state's standards. During previous decades, states focused on issuing permits to control industrial and municipal discharges into bodies of water from point sources, such as an identifiable pipe or channel. Now the focus has shifted to implementing the TMDL process and controlling pollutants, such as nutrients, bacteria, and sediments, that frequently come from various nonpoint sources, including urban storm water and agricultural runoff. There is also increased attention on other factors affecting water quality such as habitat alteration.

About 21,000 bodies of water have been placed on Section 303(d) lists. Because of time and resource constraints, coupled with legal pressures, many water bodies were put on state lists without adequate water quality data, creating a large caseload requiring cleanup efforts. Considerable uncertainty exists about whether some of these waters violate standards. In addition, other waters that are impaired have yet to be identified.

The report calls on the EPA to implement a two-step process that puts certain waters on a preliminary list before moving them to the final Section 303(d) list of those that require establishment of TMDLs. This approach would give states time to study those bodies of water for which scant data exist while concentrating efforts on sites found to be in greatest need. If no legal mechanism exists for states to move waters from the 303(d) list to a preliminary list, the report recommends that Congress create one. However, no body of water should remain on a preliminary list for more than a predetermined period that allows for problems to be identified and solutions developed.

To improve the TMDL process, states should develop more refined water quality standards including the use of biological measurements to complement physical and chemical ones. The report promotes greater use of statistical approaches for the design of monitoring programs and for the analysis of data to determine if standards have been violated. Scientific uncertainty—caused, for example, by limited data or natural variability—should be acknowledged and taken into account. So that TMDL plans are not halted because of a lack of scientific information, the states should adopt an approach called adaptive implementation, whereby plans are periodically assessed and revised using new data and scientific tools.

Last October, Congress suspended EPA's implementation of these rules until further information could be gathered. In particular, Congress asked the National Research Council to examine the program's scientific basis for determining which waters are impaired and for developing TMDLs. Under the 1992 regulations, states are required to meet a deadline of 8 to 13 years for establishing the TMDLs. Only six





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states have enough data to fully assess the condition of their waters, according to the General Accounting Office.

The report is available at the National Academy Press web site, www.nap.edu/catalog/10146.html.

Committee to Assess the Scientific Basis of the Total Maximum Daily Load Approach to Water Pollution Reduction, Water Science and Technology Board, National Research Council, 2001, Assessing the TMDL Approach to Water Quality Management. National Academy Press, Washington, D.C., 122 pp.



EPA Releases Draft Report on Costs of TMDL Program

In July 2000, the Environmental Protection Agency estimated costs of changes to the Total Maximum Daily Loads (TMDL) program that were included in a rule issued by the Agency. TMDLs are calculations of how much pollutant load reduction is needed to restore polluted waters to standards adopted for those waters and allocations of those reductions to sources of the pollutant. Those changes, which affected only the costs to states and territories to develop TMDLs, were estimated to cost approximately \$23 million annually. In response to a Congressional request for information, the EPA recently prepared *The National Costs of the Total Maximum Daily Load Program (Draft Report)*. The draft report looks at all costs to develop TMDLs, including the additional provisions of the July 2000 rule, and the costs to sources of pollutants to implement the TMDLs.

Key findings in this report are:

- The costs to pollutant sources for implementing the TMDL program are expected to be between approximately \$1 billion and \$3.4 billion per year.
- The total average annual costs to states and EPA of developing TMDLs, over the next 15 years, are estimated to be between \$63-\$69 million per year, nationwide.
- The cost of water quality monitoring to support the development of TMDLs is expected to be approximately \$17 million per year.
- Clustering TMDLs through a watershed approach can significantly reduce the costs of developing TMDLs.
- The EPA provides substantial funding to the states for management of the full range of Clean Water Act programs.

In FY 2001, the EPA expects to invest about \$21.7 million in management of the current TMDL program. About \$10 million of this funding is available to EPA Regions as contract funds to support development of TMDLs at the request of a state or where the EPA is required to develop a TMDL to “backstop” a state.





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The draft report is [available from MESO](#) (284 KB Adobe™ Acrobat™ file) or at www.epa.gov/owow/tmdl/draftdocs.html.

EPA Press Release, August 3, 2001.

Federal Register, Volume 66, Number 154, Thursday, August 9, 2001, pp. 41875-41876.



POTW Association Issues TMDL Position Paper

On July 18, 2001, the Association of Metropolitan Sewerage Agencies (AMSA) issued a position paper setting forth the wastewater treatment community's key positions on the Environmental Protection Agency July 2000 total maximum daily load (TMDL) rule governing the cleanup of impaired waters nationwide. AMSA's White Paper recommends further discussions between the EPA and stakeholders on the TMDL program and its regulations to address the following issues of concern:

- Ensure that all impaired waterbodies regardless of the source of impairment – either nonpoint sources only, or blended point and nonpoint sources – are included on Clean Water Act Section 303(d) lists, that load allocation (LAs) are assigned to nonpoint sources and “reasonable assurances” maintained to ensure their implementation, and that states do not impose on point sources portions of the nonpoint source load not eliminated through implementation;
- Retain provisions that increase the transparency of the listing and delisting process;
- Promote state development of 1) processes to review and revise water quality standards (WQS) (designated uses and/or water quality criteria) to ensure the foundation of the TMDL program is on solid ground and limited resources are applied effectively; and 2) methodologies for considering and evaluating data and information to determine which waterbodies will be listed under Section 303(d);
- Develop “interim permitting” guidance allowing existing National Pollutant Discharge Elimination System (NPDES) permit limits to be upheld in the interim period before TMDLs are complete;
- Incorporate a “phased” or “adaptive” approach to TMDL development;
- Account for the benefits of existing wet weather programs and initiatives through the TMDL program;
- Establish minimum data quality standards for Section 303(d) listings and an explicit preference for actual monitoring data over modeled data;
- Apply the same criteria and standards for listing and delisting;
- Streamline the multi-part Section 303(d) list to not include: waterbodies impaired by “pollution”, waterbodies not making “substantial progress”, or waterbodies expected to meet water quality standards or to become impaired by the next listing cycle, Tier 3 waters, or waterbodies impaired by atmospheric deposition;





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- Set reasonable goals for developing TMDLs and attaining WQS; and,
- Clarify roles for the federal government, state regulatory entities, and permittees.

The Association of Metropolitan Sewerage Agencies white paper, *EPA's Total Maximum Daily Load Rule*, is available at www.amsa-cleanwater.org/advocacy/7-18-01tmdlwhitepaper.pdf (45.0 KB Adobe™ Acrobat™ file).

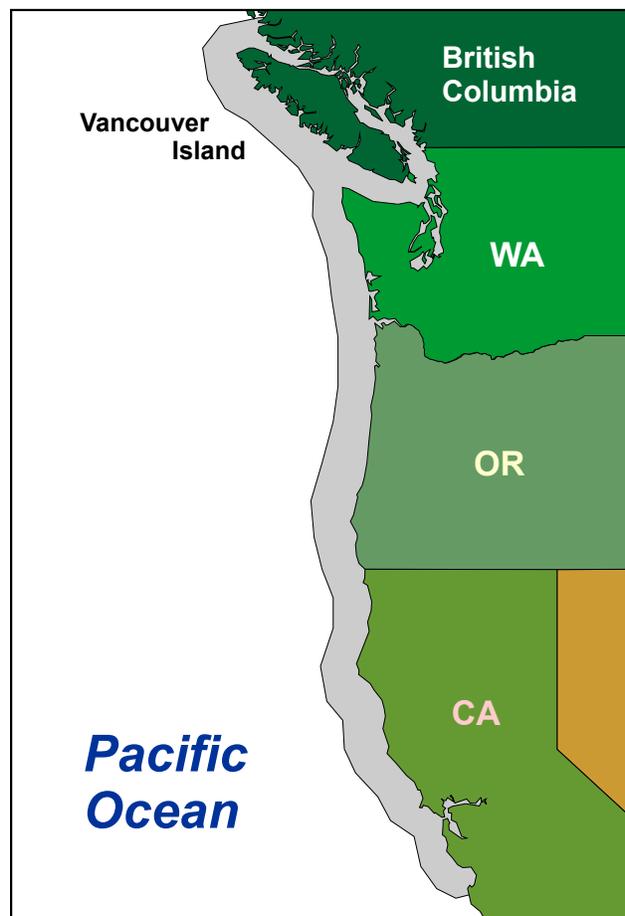
[*Clean Water Advocacy - News Release, July 18, 2001.*](#)



NMFS to Review ESA Status of Eastern North Pacific Southern Resident Stock of Killer Whales

On May 2, 2001, the National Marine Fisheries Service (NMFS) received a petition to list the Eastern North Pacific Southern Resident stock of killer whales (*Orcinus orca*) as an endangered or threatened species under the Endangered Species Act (ESA). The petitioners further requested concurrent designation of critical habitat for this species in accordance with the ESA. The Eastern North Pacific Southern Resident stock is trans-boundary, and occurs mainly within the inland waters of Washington State and southern British Columbia, but also in coastal waters from British Columbia through California (see figure, right).

The petition presents detailed narrative information, based on the available data from the annual killer whale censuses, that shows that the stock (as defined) has gone through periods of growth and decline from a low of fewer than 70 animals in 1973 to a high of 97 individuals in 1996 followed by period of decline to 82 individuals at the beginning of 2000. The petition further describes the killer whale's distribution worldwide and provides arguments for further delineating Southern Resident killer whales as a distinct population segment. Variability in recruitment and survival, reduced food resources, residual effects from live captures in the 1960s and 70s on the current age and sex structure of the



Approximate distribution of the Eastern North Pacific Southern Resident killer whale stock (shaded area).



population, behavioral changes associated with increased whale watching disturbance, and increased levels of toxic contaminants are highlighted as possible threats faced by the species.

Pursuant to this review, the agency is seeking available information on:

- Historical and current known ranges of resident (fish eating) and transient (mammal-eating) killer whales;
- Spatial and seasonal distribution with particular focus on current and historical habitat utilization;
- Genetic variability in resident, transient, and offshore killer whale populations;
- Demographic movements among resident or transient killer whales;
- Trends in killer whale foraging habits and seasonal prey abundance;
- Trends in environmental contamination by persistent organic pollutants (*e.g.*, polychlorinated-biphenyls (PCBs) including congener specific data) as well as other contaminants (*e.g.*, toxic metals);
- Contaminant burdens in prey species, especially salmonids;
- Impacts caused by human recreational activities (*e.g.*, whale watching, boating);
- Historic removals of killer whales including human-caused mortality associated with live capture operations, military activities, or fisheries interactions;
- Current or planned activities and their possible impacts on this species (*e.g.*, removals or habitat modifications);
- Efforts being made to protect resident killer whales or improve their habitat; and
- Non-human related factors that may have contributed to the recent decline of the Southern Resident killer whale (*i.e.*, climatic or oceanographic regime shifts, diseases, biotoxins).

The NMFS is also requesting information concerning the quality and extent of marine habitats for the Southern resident killer whale, in particular, any areas that may qualify as critical habitat. Information and comments on the action must be received by October 12, 2001. For further information contact Garth Griffin, NMFS, Northwest Region, (503) 231-2005 or Tom Eagle, NMFS, Office of Protected Resources, (301) 713-2322 ext. 105.

The full text of this notice is available from MESO ([text only](#) or 41.2 KB [Adobe™ Acrobat™ file](#)).

Federal Register, Volume 66, Number 156, Monday, August 13, 2001, pp. 42499-42501.



Marine Protected Areas in Southern California Proposed

California Assembly Bill 993 (Shelley), the Marine Life Protection Act (MLPA), was introduced in February 1999 and chaptered in October 1999. The language is now included in Chapter 10.5 of the





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California Fish and Game Code, Sections 2850 to 2863. The purpose of the MLPA is to improve the array of Marine Protected Areas (MPAs) existing in California waters through the adoption of a Marine Life Protection Program and a comprehensive master plan. The MLPA states that “marine life reserves” (defined as no-take areas) are essential elements of an MPA system because they “protect habitat and ecosystems, conserve biological diversity, provide a sanctuary for fish and other sea life, enhance recreational and educational opportunities, provide a reference point against which scientists can measure changes elsewhere in the marine environment, and may help rebuild depleted fisheries.”

The master plan requires that recommendations be made for a preferred alternative network of MPAs with “an improved marine life reserve component.” The MLPA further states that “it is necessary to modify the existing collection of MPAs to ensure that they are designed and managed according to clear, conservation-based goals and guidelines that take full advantage of the multiple benefits that can be derived from the establishment of marine life reserves.”

The California Department of Fish and Game (CA DFG) is the lead agency charged with implementing the provisions of the MLPA. Several areas proposed by the CA DFG in the South Region may directly impact on Navy operations. These include:

1. Pendleton State Marine Reserve: Northern: Horno Canyon (33° 20.00' N, 117° 29.76' W) west along latitude 33° 20' N to a distance of 3 nautical miles offshore. Southern: Northern range markers (33° 15.00' N, 117° 25.88' W) south along longitude 117° 25.88' W to a distance of 3 nautical miles offshore. Offshore boundary is 3 nautical miles from shore;
2. Point Loma State Marine Reserve: Northern: Latitude 32° 42.00' N, Longitude 117° 15.33' W west along latitude 32° 42.00' N to a distance of 3 nautical miles offshore. Southern: Southern boundary of current Cabrillo National Monument south to green #5 buoy (32° 39.10' N, 117° 13.60' W) continuing north along 1 nautical mile offshore boundary until latitude 32° 39.9' N then extending to 3 nautical miles offshore. Offshore boundary is from 1 to 3 nautical miles from shore; and
3. East San Clemente State Marine Reserve (San Clemente Island): An area bounded by the following points and extending to the shore: (1) 32° 59.60' N, 118° 32.80' W; (2) 33° 00.30' N, 118° 31.20' W; (3) 32° 58.60' N, 118° 30.00' W; and (4) 32° 57.90' N, 118° 31.30' W.

Further information (including maps of all proposed Marine Protected Areas) is available at www.dfg.ca.gov/mrd/mlpa/.



NMFS Report Recommends Ship Movement Restrictions to Protect Right Whales

On August 1, 2001, National Marine Fisheries Service (NMFS) released a report that urges establishment of regionally specific speed and routing restrictions for ships to protect endangered North Atlantic right whales (*Eubalaena glacialis*) from collisions (see also *Marine Environmental Update*, [Vol. Fy96, No. 4](#)).

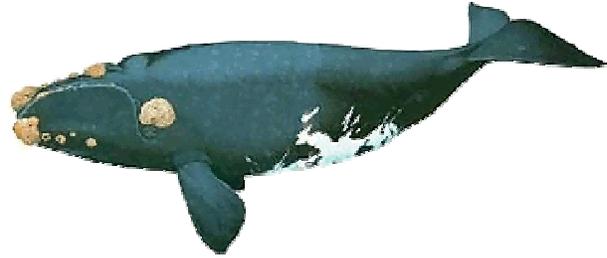




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A committee working with federally-mandated whale protection teams in the Northeast and Southeast United States compiled the draft report.

The draft report will be submitted to the Northeast and South Recovery Plan Implementation Teams, which were established in 1994 by NOAA Fisheries under the ESA to implement the Right Whale Recovery Plan. A final report will be submitted to NOAA Fisheries in September 2001.



The right whale (Eubalaena glacialis).

The draft report calls for three types of measures:

1. Routing of ships around observed whales;
2. Speed restrictions on vessels operating in right whale habitats; and
3. Mandatory shipping lanes when transiting through critical habitat areas (to minimize travel distances through the habitat).

The draft report calls for different measures or combinations of measures in different East Coast waters, particularly in approaches to ports. Some of the specific recommendations in the report are:

Vessel operating restrictions

- Designate the Cape Cod Bay critical habitat as seasonal area to be avoided.
- Designate the Boston Approach shipping lane as a mandatory route, and designate the Great South Channel right whale critical habitat east of the shipping lane as an area to be avoided.
- Establish a seasonal management area to encompass parts of the Boston Approach Sea Lane to the west, east and south of Race Point, Cape Cod, MA. Establish seasonal management areas at major port entrances from Block Island, RI, south to and including Savannah, GA.
- Establish mandatory or designated recommended routes for the ports of Brunswick, GA, Jacksonville, FL and Fernandina Beach, FL.
- Establish a seasonal 10-knot speed restriction for vessels calling at the ports of Brunswick, GA, Jacksonville, FL and Fernandina Beach, FL.
- Require for each recommended measure above that each vessel, prior to entering critical habitat or dynamic or seasonal management area, check steering, ensure engines are ready for maneuvering, and post trained lookouts (not necessarily additional lookouts).
- Should acoustic/sonar-detection technology prove effective and environmentally safe and become available, NMFS should offer use of this equipment subject to certain conditions as an option, instead of routing around or slowing.

U.S. Navy Operations

- The U.S. Navy should conduct a Section 7 consultation on naval operations (air and sea) for areas under the jurisdiction of NMFS Northeast Region.





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- The Navy should issue specific operating procedures for vessel operations in the Norfolk/Hampton Roads area similar to those issued for operations off the Southeast U.S.
- The Navy should issue specific operating procedures for air operations for its Brunswick, ME Naval Air Station similar to those issued for operations off the Southeast U.S.

U.S. Department of Transportation Maritime Administration (MARAD)

- MARAD should conduct a Section 7 consultation for the operation of its inactive National Defense Reserve Fleet located at Ft. Eustis, Virginia (conducting periodic sea trials off the mouth of Chesapeake Bay), and its 86 domestically stationed ships operating off the U.S. east coast. This agency should participate on the Implementation Teams.

U.S. Military Sealift Command (MSC)

- MSC should conduct a Section 7 consultation for the operation of 28 vessels it operates in the Atlantic area. This agency should participate on the Implementation Teams.

More information may be found at www.nero.nmfs.gov/whaletrp/4a.html.

Bruce A. Russell, Ship Strike Committee Report on Recommended Measures to Reduce Ship Strikes of North Atlantic Right Whales – Final Draft, *National Marine Fisheries Service*, August 1, 2001.



Final FWS Designation of Critical Habitat for Wintering Piping Plovers

On July 3, 2001, the Fish & Wildlife Service (FWS) announced the final designation of wintering habitat for the piping plover, *Charadrius melodus*. The decision came as a response to two court orders stemming from court cases in 1996 and 1997. The FWS has designated 165,211 acres along 1,798 miles of coastline in eight southern states as critical habitat for the wintering population of piping plover. Three populations of piping plovers exist in the United States. The most endangered of these is the Great Lakes population, which is classified as endangered and encompasses only 32 breeding pairs. The Northern Great Plains and Atlantic Coast populations are classified as threatened and include 1,398 and 1,372 breeding pairs, respectively.



The piping plover (Charadrius melodus). FWS photograph.





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The FWS originally proposed to designate 2.1 million acres along 1,672 miles of coastline as critical habitat for wintering plovers. The final rule significantly reduces the acreage amount by removing a proposed 1,640-foot buffer extending into the water. As a result of removing the buffer, the actual mileage of coastline increased slightly since inlets and headlands of the coastline are delineated more precisely. The designation now includes no areas covered by water, but land down to the low tide mark will be considered critical habitat.

The complete text of this rule is available from MESO ([text only](#) or 8.00 MB [Adobe™ Acrobat™ file](#)). Further information is available at plover.fws.gov.

FWS Press Release, July 3, 2001.

Federal Register, Volume 66, Number 1332, Tuesday, July 10, 2001, pp. 36037-36042.



NMFS Proposes Rule Governing Take of 4 Threatened West Coast Salmonid ESUs

On August 17, 2001, the National Marine Fisheries Service (NMFS) issued a proposed rule governing the take of threatened evolutionarily significant units (ESUs) of the California Central Valley Spring-run Chinook; the California Coastal Chinook; the Northern California Steelhead; and the Central California Coast Coho (see *Marine Environmental Update*, [Vol. FY99, No. 4](#)). The following is a list of activities that may be most likely to cause harm and thus violate this rule:

- A. Constructing or maintaining barriers that eliminate or impede a listed species' access to habitat or ability to migrate.
- B. Discharging pollutants, such as oil, toxic chemicals, radioactivity, carcinogens, mutagens, teratogens or organic nutrient-laden water including sewage water into a listed species' habitat.
- C. Removing, poisoning, or contaminating plants, fish, wildlife, or other biota required by the listed species for feeding, sheltering, or other essential behavioral patterns.
- D. Removing or altering rocks, soil, gravel, vegetation or other physical structures that are essential to the integrity and function of a listed species' habitat.
- E. Removing water or otherwise altering stream flow when it significantly impairs spawning, migration, feeding or other essential behavioral patterns.
- F. Releasing non-indigenous or artificially propagated species into a listed species' habitat or where they may access the habitat of listed species.
- G. Constructing or operating dams or water diversion structures with inadequate fish screens or fish passage facilities in a listed species' habitat.
- H. Constructing, maintaining, or using inadequate bridges, roads, or trails on stream banks or unstable hill slopes adjacent to or above a listed species' habitat.





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- I. Conducting timber harvest, grazing, mining, earth-moving, or other operations which result in substantially increased sediment input into streams.
- J. Conducting land-use activities in riparian areas and areas susceptible to mass wasting and surface erosion, which may disturb soil and increase sediment delivered to streams, such as logging, grazing, farming, and road construction.
- K. Illegal fishing. Harvest in violation of fishing regulations will be a top enforcement concern.
- L. Various streambed disturbances may trample eggs or trap adult fish preparing to spawn. The disturbance could be mechanical disruption caused by constructing push-up dams, removing gravel, mining, or other work in a stream channel. It may also take the form of egg trampling or smothering by livestock in the streambed or by vehicles or equipment being driven across or down the streambed (as well as any similar physical disruptions).
- M. Interstate and foreign commerce dealing in listed salmonids and importing or exporting listed salmonids may harm the fish unless it can be shown through an ESA permit – that they were harvested in a manner that complies with ESA requirements.
- N. Altering lands or waters in a manner that promotes unusual concentrations of predators.
- O. Shoreline and riparian disturbances (whether in the riverine, estuarine, marine, or floodplain environment) may retard or prevent the development of certain habitat characteristics upon which the fish depend (*e.g.*, removing riparian trees reduces vital shade and cover, floodplain gravel mining, development, and armoring shorelines reduces the input of critical spawning substrates, and bulkhead construction can eliminate shallow water rearing areas).
- P. Filling or isolating side channels, ponds, and intermittent waters (*e.g.*, installing tide gates and impassable culverts) can destroy habitats that the fish depend upon for refuge areas during high flows.

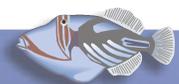
The complete text of the proposed rule is available from MESO ([text only](#) or 121 KB [Adobe™ Acrobat™ file](#)).

Federal Register, Volume 66, Number 160, Friday, August 17, 2001, pp. 43150- 43170.



FWS Reaches Agreement on Listing Additional Species under ESA

On August 29, 2001, the Fish & Wildlife Service (FWS) and several conservation organizations reached an agreement in principle that will enable the FWS to complete work on evaluations of numerous species proposed for listing under the Endangered Species Act (ESA). Under the agreement with the Center for Biological Diversity, Southern Appalachian Biodiversity Project, California Native Plant Society, and the Biodiversity Legal Foundation, the FWS will issue final listing decisions for 14 species and propose eight more species for listing. The FWS also will be able to take action on four citizen petitions to list species under the ESA. The FWS and the organizations have agreed to extend deadlines for eight other critical habitat designations, thereby making funds available for these actions.





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The deadlines for final critical habitat designations for five species and proposed and final critical habitat designations for three others will be extended into the next fiscal year. The FWS will use the funds that would have been spent on these actions in fiscal year 2001 and early fiscal year 2002 to list new species, propose new listings, work on other critical habitat designations, and respond to petitions. The parties must still negotiate a written settlement document. The agreement, including the written document, must then be reviewed and approved by the appropriate supervisory officials at the Departments of the Interior and Justice before it is finalized and presented to the courts.

Some species included under the agreement are:

- San Diego ambrosia (California), Final Listing Determination: The San Diego ambrosia a herbaceous, rhizomatous, perennial plant that typically grows from 2 to 12 inches tall (occasionally reaching 20 inches). This plant is restricted to San Diego and Riverside Counties, California and Baja California, Mexico, from Colonet to Lake Chapala.
- Coastal Cutthroat trout (Washington and Oregon), Final Listing Determination.
- Island fox (California), Proposed Listing Rule: Island foxes inhabit the six largest islands (San Miguel, Santa Rosa, Santa Cruz, San Nicolas, Santa Catalina, and San Clemente islands) off the coast of southern California.

Further information is available at www.fws.gov.

[*FWS Press Release, Wednesday, August 29, 2001.*](#)



FWS Proposes ESA Listing for Yellow-Billed Cuckoo in Western Continental U.S.

On July 18, 2001, the Fish & Wildlife Service (FWS) announced a 12-month finding for a petition to list the yellow-billed cuckoo (*Coccyzus americanus*) in the western continental United States under the Endangered Species Act (ESA). The FWS evaluated the population of western yellow-billed cuckoos from the portion of the United States west of the Rocky Mountain crest for consideration as a Distinct Population Segment (DPS), and eligible for listing under the ESA. In assessing the population segment's discreteness from the remainder of the taxon, the FWS described the physical separation, ecological discreteness, behavioral discreteness as reflected in the timing of migration and nesting, and morphologic data. The FWS considered distributional data, ecological, behavioral, morphologic and genetic information, information from banding returns, and geographic and biogeographic patterns and concluded that the western continental U.S. population segment is discrete under FWS DPS policy.

In assessing the population segment's significance, the FWS considered the available information, including the large geographic area represented by the western DPS, its ecological distinctness, which is typified by cottonwood-willow riparian woodlands upon which the western DPS largely depends for breeding, its genetic differences from other cuckoo populations in the eastern United States, and other





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considerations and factors discussed above. The FWS concluded that loss of the species from the portion of the United States west of the Rocky Mountain crest would represent a significant gap in the species' range, the loss of the species from a unique ecological setting, and the loss of genetic differences from eastern yellow-billed cuckoos.

The complete text of the notice is available from MESO ([text only](#) or 103 KB [Adobe™ Acrobat™ file](#)). For further information contact Stephanie Brady, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, Room 2605, Sacramento, California 95825, telephone (916) 414-6600, facsimile (916) 414-6613, e-mail stephanie_brady@fws.gov.

Federal Register, Volume 66, Number 143, Wednesday, July 25, 2001, pp. 38611-38626.

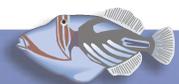


EPA Releases TIE/TRE Guidance Clarification Document

The Environmental Protection Agency announced the release of *Clarifying Regarding Toxicity Reduction And Identification Evaluations In The National Pollutant Discharge Elimination System Program*. The document provides additional clarification on existing EPA guidance on toxicity reduction evaluations (TRES) and toxicity identification evaluations (TIEs). It also discusses how NPDES permittees and permitting authorities should address some technical issues that have been raised to the EPA on conducting TRES/TIEs. While this document contains no new guidance on permitting or compliance, it responds to a July 1997 settlement agreement, which required the EPA to issue technical guidance that would provide clarification on conducting TRES/TIEs under the NPDES permitting program. This guidance clarifies for NPDES permittees and permitting authorities a number of issues including: when and under what circumstances a permittee should conduct a TRE and/or TIE; technical limitations on the TIE process; consideration of persistence and magnitude of toxicity events; ionic imbalances of effluents; the applicability of compliance schedules; and inconclusive TRES/TIEs.

The following points summarize the main conclusions of this document:

- A TRE is defined as a methodical, stepwise investigation of the cause(s) of, and appropriate control(s) for, an effluent that has demonstrated acute or chronic whole effluent toxicity (WET). Several options are available to the regulatory authority for requesting a TRE. Whenever a toxic discharge occurs, however, a permittee should consider initiating preliminary TRE procedures to reduce or eliminate toxicity.
- All technically reasonable actions taken to resolve WET should be considered TRE activities. Because TIEs are powerful and effective tools for identifying the source of WET, EPA recommends that permittees consider conducting TIEs early in the TRE process. Likewise, toxicity treatability testing can be effective when trying to resolve WET limit noncompliance and other problems with effluent toxicity.
- Permittees should seek technical review and comment from their regulatory authority when developing TRE plans that outline investigative and problem resolution techniques, including reasonable time lines and milestones, in order to avoid delays and maximize consideration of





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relevant factors that may affect toxicity. The regulatory authority should then approve the TRE schedule and completion date. The authority should either concur with the technical merit of the plan or recommend modifications that would improve its technical merit. A close cooperative relationship should be established among the permittee (and, if applicable, the permittee's technical consultant) and the permitting authority early in the TRE process. This relationship should be maintained until the TRE is successfully completed and any controls necessary to prevent unacceptable levels of toxicity are fully implemented. This process allows all parties to understand the requirements and expectations, and encourages evolution of the plan toward the most effective resolution. Collaboration among the parties throughout the TRE process will add to its effectiveness and assist in course corrections.

The document is available from the EPA at www.epa.gov/npdes/pubs/owmfinaltretrie.pdf (83.5 KB Adobe™ Acrobat™ file).

U.S. EPA, Office of Wastewater Management and Office of Regulatory Enforcement, Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge System Program, March 27, 2001.



EPA Releases Stressor Identification Technical Guidance Document

The Environmental Protection Agency has made available the *Stressor Identification Guidance Document* (EPA 822-B-00-025) published under the authority of Section 304(a)(2) of the Clean Water Act (CWA). This technical guidance document is designed to assist water quality managers in identifying unknown causes of biological impairments in any type of water body. The objective of the CWA is stated in Section 101(a) to be the restoration and maintenance the chemical, physical and biological integrity of the Nation's waters. Numerous States and Tribes are using biological assessments and biocriteria to achieve this objective. Using these tools, State and Tribal water quality experts are finding water bodies where the fish, invertebrate, algae or plant communities (or other aquatic life) have been detrimentally impacted by different singular or multiple causes. In many cases, the cause, or causes, of these biological impairments have not yet been identified. The *Stressor Identification Guidance Document* provides a logical, scientific process by which State, Tribal, and other water quality experts can evaluate available information to identify the stressor(s) causing the biological impairments.

The process has three main steps: (1) list candidate causes of impairment, (2) analyze the evidence, and (3) characterize the causes. When evidence is adequate, using this guidance, investigators should be able to successfully identify the likely cause, or causes. This guidance will also help investigators identify where evidence is weak or lacking and needs to be developed to be able to successfully identify the stressor(s). Once the causes of the biological impairments are identified, water resource managers will be better able to locate the sources of the stressor, or stressors, and take management actions aimed at improving the biological condition of the water body.





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The document is available at www.epa.gov/waterscience/biocriteria/stressors/stressorid.html.

U.S. EPA, Office of Water and Office of Research & Development, Stressor Identification Guidance Document, EPA 822-F-00-012, December 2000.



EPA Announces Draft National Beach Guidance & Performance Criteria for Recreation Waters

The Environmental Protection Agency (EPA) has developed and is requesting public comments on the draft *National Beach Guidance and Performance Criteria for Recreation Waters*. The document provides proposed performance criteria for monitoring and assessment of coastal recreation waters adjacent to beaches, and prompt public notification of any exceedance or likelihood of exceedance of applicable water quality standards for pathogens and pathogen indicators for coastal recreation waters.

The performance criteria and guidance document has three functions. First, it establishes performance criteria for (a) monitoring and assessment of coastal recreation waters adjacent to beaches (or similar points of access that are used by the public) for attainment of applicable water quality standards for pathogens and pathogen indicators; and (b) the prompt public notification of any exceedance or likelihood of exceedance of applicable water quality standards for pathogens and pathogen indicators for coastal recreation waters. Second, this document summarizes the requirements for grants. It explains whether the requirements apply to development grants, implementation grants, or both. Third, this document is intended to promote consistency among States and localities by recommending standard approaches for recreational water quality programs.

The document will assist local health departments, water quality managers, beach managers, and other local, State, and Tribal agencies to (a) improve microbial water quality monitoring programs for more consistent protection of coastal recreation waters, (b) assess, manage, and communicate health risks from waterborne microbial contamination, (c) notify the public of beach advisories and implement closings to help prevent public exposure to potentially harmful pathogens.

The document can also serve as a reference guide for how and when to conduct beach assessments because it includes protocols for water sample collection, sample handling, and laboratory analysis. It provides information about the use of predictive models to estimate indicator levels and includes procedures for public notification about beach advisories, closings, and openings. The complete text of the announcement is available from MESO ([text only](#) or 41.7 KB [Adobe™ Acrobat™ file](#)). For further information contact Office of Water Resources Center, U.S. Environmental Protection Agency, RC-4100, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, telephone (202) 260-7786.

Federal Register, Volume 66, Number 147, Tuesday, July 31, 2001, pp. 39510-39512.





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Hawaii State Water Quality Standards Revisions

The Hawaii State Department of Health (DOH) recently reviewed Hawaii's Water Quality Standards (HAR Chapter 11-54) and is proposing to revise material in each of five sections. The purpose of these revisions is to make Hawaii's rules comply with federal and state law. The proposed revision to the classification of streams will aid in the implementation of the Total Maximum Daily Load (TMDL) program, which will assist in the restoration of impaired waterbodies. The proposed amendments include revisions to the following sections:

- Classification, uses, and specific criteria for inland waters (adds criteria for classification of perennial streams);
- Criteria for inland and marine recreational waters (changes the indicator bacteria criterion for inland waters and restricts applicability of criteria to locations where human sewage is highly likely to contribute to enterococcus counts);
- Criteria for open coastal waters (changes the ammonium criteria on the basis of new data);
- Antidegradation policy (updates Hawaii's policy and conforms it to federal policy); and
- Definition of state waters (made consistent with State law).

Further information is available at www.state.hi.us/health/eh/epo/wqrev.htm.



Proposed EPA Test Procedure Guideline Amendments, New & Corrected EPA Methods

Proposed Amendments to Guidelines Establishing Test Procedures for the Analysis of Pollutants

On August 30, 2001, the Environmental Protection Agency proposed to amend the "Guidelines Establishing Test Procedures for the Analysis of Pollutants" under Section 304(h) of the Clean Water Act (CWA), by adding several analytical test procedures for enumerating the bacteria, *Escherichia coli* and enterococci, and the protozoans, *Cryptosporidium* and *Giardia*, in ambient water to the list of Agency-approved methods. The proposal would make available a suite of Most Probable Number (MPN; *i.e.*, multiple-tube, multiple-well) and membrane filter (MF) methods for enumerating *E. coli* and enterococci bacteria in ambient water.

Both culture-based and enzyme-substrate techniques are included. Some test methods are also applicable to total coliform determinations when these are the preliminary or concurrent steps for *E. coli* enumeration. Similarly, the document proposes new methods for detecting *Cryptosporidium* and *Giardia* in ambient water. Regulators may use these test procedures to assess *Cryptosporidium* and *Giardia* concentrations in ambient waters.



Examples of potentially affected and/or regulated entities are listed in the following table.

Category	Examples of potentially affected/regulated entities
Regional, State, and Territorial Governments and Indian Tribes.	States, Territories, and Tribes authorized to administer the water quality standards programs States, Territories, and Tribes providing certification under Clean Water Act section 401; Governmental permittees.
Municipalities	Publicly owned treatment works with water quality-based permits.
Industry	Industrial facilities with water quality-based permits.

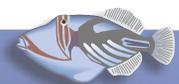
Comments must be postmarked, delivered by hand, or electronically mailed on or before October 29, 2001. For further information contact Maria Gomez-Taylor, Ph.D.; Engineering and Analysis Division (4303); Office of Science and Technology; Office of Water; U.S. Environmental Protection Agency; Ariel Rios Building; 1200 Pennsylvania Avenue, NW.; Washington, DC 20460, or call (202) 260-1639; or Robin Oshiro; Office of Science and Technology (4304); Office of Water; U.S. Environmental Protection Agency; Ariel Rios Building; 1200 Pennsylvania Avenue, NW.; Washington, DC 20460, or call (202) 260-7278.

Federal Register, Volume 66, Number 169, Thursday, August 30, pp. 45811- 45829.

EPA Releases New Methods for Assessing Chronic Toxicity of Marine & Estuarine Sediment-Associated Contaminants

On July 20, 2001, the Environmental Protection Agency and the Army Corps of Engineers (ACOE) published the technical manual, *Methods for Assessing the Chronic Toxicity of Marine and Estuarine Sediment-associated Contaminants with the Amphipod Leptocheirus plumulosus—First Edition* (EPA/600/R-01/020), that describes procedures for testing an estuarine organism in the laboratory to evaluate the potential toxicity of contaminants in whole sediments. The document supplements (but does not replace) procedures originally published in 1994 (EPA/600/6-94/025), for measuring acute sediment toxicity in marine and estuarine sediments. The document includes a new method for evaluating sublethal effects of sediment-associated contaminants utilizing long-term sediment exposures.

Toxicity methods are outlined for the estuarine amphipod, *Leptocheirus plumulosus*. This 28-day sediment toxicity test with *L. plumulosus* is recommended for use with sediment with varying levels of salinity from oligohaline to fully marine environments (from 1 to 35 salinity). The long-term sediment exposures with *L. plumulosus* are started with neonate (newborn) amphipods. The use of a uniform sediment testing procedure is expected to increase data accuracy and precision, facilitate test replication, and increase the comparative value of test results.





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This method provides a basis for consistent cross-program decision making within the EPA. Each EPA program will, however, retain the flexibility of deciding when and how to use this test and whether identified risks would trigger actions. This method also provides a consistent testing protocol for other Federal agencies, States, and Tribes. This technical manual has no immediate or direct regulatory consequence. It does not impose legally binding requirements, and may not apply to a particular situation depending on the circumstances. The EPA or ACOE may change this technical manual in the future.

The complete text of the notice of availability is available from MESO ([text only](#) or 34.3 KB [Adobe™ Acrobat™ file](#)). Copies of the complete document can be obtained from the National Service Center for Environmental Publications, P.O. Box 42419, Cincinnati, OH 45242; telephone (800) 490-9198; or at www.epa.gov/ncepihom/orderpub.html. Further information may be found at www.epa.gov/ost.

Federal Register, Volume 66, Number 140, Friday, July 20, 2001, p. 37961.

*U.S. EPA Office of Science and Technology and the U.S. Army Corps of Engineers, Methods for Assessing the Chronic Toxicity of Marine and Estuarine Sediment-associated Contaminants with the Amphipod *Leptocheirus plumulosus*—First Edition, EPA/600/R-01/020, July, 2001.*

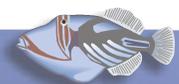
EPA Issues Technical Correction to Method 1631

On June 18, 2001, the Environmental Protection Agency amended the “Guidelines Establishing Test Procedures for the Analysis of Pollutants” to make minor technical corrections to clarify the use of field blanks for mercury testing under the Clean Water Act. Specifically, the amendments rectify an omission in the text of the promulgated version of Method 1631: Mercury in Water by Oxidation, Purge and Trap and Cold Vapor Atomic Fluorescence Spectrometry.

The EPA proposed Method 1631: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry on May 26, 1998 (63 FR 28867), and then, after revisions following public comment, the EPA promulgated Method 1631, Revision B on June 8, 1999 (64 FR 30417, see *Marine Environmental Update, Vol. FY99, No. 3*). On October 19, 2000, EPA entered into a Settlement Agreement to resolve litigation over the final rule in *Alliance of Automobile Manufacturers, et al. v. EPA, No. 99-1420 (D.C. Cir.)*.

Under the Settlement Agreement, the EPA agreed to revise sections 12.4.2 and 9.4.3.3 of the test method to clarify the use of field blank subtraction (section 12.4.2) and the use of multiple field blanks (section 9.3.3.3) to determine whether test samples should be used for compliance monitoring purposes. At the time the EPA published the challenged rulemaking, the EPA had intended to incorporate these changes into the rule, as reflected by the preamble and the comment-response document in the public record. Revision C of Method 1631 now incorporates these technical corrections. No other changes are being made to the text of the referenced test protocol.

For additional information concerning this action contact Maria Gomez-Taylor at the U.S. Environmental Protection Agency, Office of Water, Engineering and Analysis Division (4303), 401 M Street, S.W., Washington, D.C.; telephone (202) 260-1639; or email: Gomez-Taylor.Maria@epamail.epa.gov. The complete text of Method 1631, Revision C, may be viewed or downloaded on the Internet at





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www.epa.gov/waterscience/methods/1631.html. Also, you may obtain copies of Method 1631, Revision C, through the USEPA National Service Center for Environmental Publications and Information (NSCEP), 11029 Kenwood Road, Cincinnati, OH 45242; telephone (800) 490-9198; or on the Internet at www.epa.gov/ncepi.

Federal Register, Volume 66, Number 117, Monday, June 18, 2001, pp. 32774- 32776.



ACOE Issues Technical Correction to Proposed NWP

On August 21, 2001, the Army Corps of Engineers issued a technical correction to its Proposal To Reissue and Modify Nationwide Permits (66 FR 42069; see *Marine Environmental Update Bulletin, August 9, 2001*). The correction is on page 42090, in the third column, in the third paragraph, in the second line, the fraction “1/10”, should read “1/2”.

Federal Register, Volume 66, Number 162, Tuesday, August 21, 2001, p. 43961 ([text only](#) or 16.0 KB [Adobe™ Acrobat™ file](#)).



The *Marine Environmental Update* is produced quarterly as an information service by the Marine Environmental Support Office (MESO) to inform the Navy environmental community about issues that may influence how the Navy conducts its operations. The contents of this document are the responsibility of the Marine Environmental Support Office and do not represent the views of the United States Navy. References to brand names and trademarks in this document are for information purposes only and do not constitute an endorsement by the United States Navy. All trademarks are the property of their respective holders. Approved for public release; distribution is unlimited.

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